



Amendments to the Drawings

The attached replacement sheets of drawings include changes to Figs. 1 and 3, where "HIGH PRESSURE INTRODUCING PART" has been amended to "HIGH VOLTAGE INTRODUCING PART." The replacement sheets are intended to replace Figs. 1 and 3 currently before the Examiner.

Attachment: Two Replacement Sheets

Remarks

Claims 1-5 are currently pending in the Application and Claims 6-9 are newly presented herein.

Claim amendments

This response amends Claims 1-4 to clarify the scope of the invention and cancels Claim 5 without prejudice. Support for the amendments can be found, for example, in Figure 5 and on pages 13-14 of the specification. No new matter has been added.

New Claims

This response adds new claims 6-9. The new claims are used to more completely claim the invention and are **not** offered in response to the Examiner's rejections.

Support for the new Claim 6 can be found in Figure 5 and on page 17, line 19 to page 18, line 18 of the specification.

Support for the new Claim 7 can be found in Figure 6 and on page 19, line 10 to page 20, line 7 of the specification.

Support for the new Claim 8 can be found on page 12, lines 1-18 of the specification.

Support for the new Claim 9 can be found in Figure 3 and on page 20, line 23 to page 21, line 12 of the specification.

Drawing amendments

This response amends Figs. 1 and 3, by replacing "HIGH PRESSURE INTRODUCING PART" with "HIGH VOLTAGE INTRODUCING PART." Support for the amendments can be found, for example, on page 1, line 12 to page 2, line 5 of the specification. No new matter has been added.

35 U.S.C. §112, second paragraph, rejection

Claim 1 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. According to the Examiner, Claim 1 refers to “said X-ray microscopic inspection” that lacks the antecedent basis. Applicants submit that Claim 1 has been amended to overcome this objection by reciting “an X-ray microscopic inspection” on line 1 of Claim 1. Hence, Applicants request that the rejection be withdrawn.

35 U.S.C. §102(b) Rejection

Claim 1 stands rejected under 35 U.S.C. §102(b) as being anticipated by Michel (U.S. Patent No. 4,544,845). Claim 2 stands rejected under 35 U.S.C. §102(b) as being anticipated by Wang (U.S. Patent No. 5,317,574). Claim 3 stands rejected under 35 U.S.C. §102(b) as being anticipated by Hojoh (U.S. Publication No. 2002/0130039). Claims 1 and 4 stand rejected under 35 U.S.C. §102(b) as being anticipated by Wilkins (U.S. Patent No. 6,430,254). Applicants respectfully disagree.

The Examiner is reminded that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP 2131 quoting *Verdegaal Bros. V. Union Oil Co, of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Examiner is also reminded that “[the] identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP 2131 quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicants submit that the cited references do not teach each and every element as set forth in the rejected claims. In particular:

Claim 1 in view of Michel

Applicants submit that Michel does not disclose, suggest or teach, *inter alia*, at least the following features recited by amended Claim 1 of the present application:

“... magnetic field generating portion is disposed **separately** from said ultra-high vacuum electron gun chamber ...” (emphasis added)

The Examiner asserts that the “magnetic field generating portion” as recited in Claim 1 is disclosed by Michel’s “upper pole 61.” See page 2, last line of the Official Action. Applicants respectfully traverse the Examiner’s assertion.

According to Michel, the upper pole “61” is located in enclosure “6” that is connected to a very high vacuum generating member through orifice “7.” See column 2, lines 20-26 and Figure 1 of Michel. Because the upper pole “61” is located in the vacuum chamber “6,” Michel does not teach, disclose or suggest “magnetic field generating portion is disposed **separately** from said ultra-high vacuum electron gun chamber” (emphasis added) as recited in amended Claim 1.

Hence, Claim 1 is patentable over Michel and should be allowed by the Examiner. Claims 2-4 and new Claims 6-9, at least based on their dependency on Claim 1, are also believed to be patentable over Michel.

Claims 2-3

Claims 2-3 have been amended to depend from Claim 1 and at least based on their dependency on Claim 1 are believed to be patentable over Wang and Hojoh respectively.

Claim 1 in view of Wilkins

A. Applicants submit that Wilkins does not disclose, suggest or teach, *inter alia*, at least the following features recited by amended Claim 1 of the present application:

“...a magnetic superposition lens including a magnetic circuit and a magnetic field generating portion, wherein said magnetic field generating portion is disposed **separately** from said ultra-high vacuum electron gun chamber ...” (emphasis added)

The Examiner asserts that the “magnetic superposition lens” as recited in Claim 1 is disclosed by Wilkins’ “focusing magnet 75.” See page 4, line 13 of the Official Action. Applicants respectfully traverse the Examiner’s assertion.

According to Wilkins, the focusing magnet “75” is disposed within an evacuable chamber “77.” See column 6, lines 54-56 and Figure 5 of Wilkins. Because the focusing magnet “75” is located in the vacuum chamber “77,” Wilkins does not teach, disclose or suggest “a magnetic superposition lens including a magnetic circuit and a magnetic field generating portion, wherein said magnetic field generating portion is disposed **separately** from said ultra-high vacuum electron gun chamber” (emphasis added) as recited in amended Claim 1.

Hence, Claim 1 is patentable over Wilkins and should be allowed by the Examiner. Claims 2-4 and new Claims 6-9, at least based on their dependency on Claim 1, are also believed to be patentable over Wilkins.

B. Applicants submit that Wilkins does not disclose, suggest or teach, *inter alia*, at least the following features recited by amended Claim 1 of the present application:

“wherein the electron generating portion is adapted to generate electrons ... said magnetic superposition lens is adapted to generate a magnetic field, wherein said **electron generating portion is disposed in said magnetic field**” (emphasis added)

The Examiner asserts that the “magnetic superposition lens” as recited in Claim 1 is disclosed by Wilkins’ “focusing magnet 75.” See page 4, line 13 of the Official Action. Applicants respectfully traverse the Examiner’s assertion.

According to Wilkins, the electrons are generated by an electron beam source, not shown in Wilkins, and are passed through a shielded pipe “70” before being focused by the focusing magnet “75.” See column 6, lines 42-51 of Wilkins. Because Wilkins does not show the electron beam source it is not known how far the electron beam source is located from the focusing magnet “75.” Therefore, it is not known if the electron beam source is located in a magnetic field generated by the focusing magnet “75.” Because Wilkins does not specifically teach that the electron beam is located within the magnetic field of the focusing magnet “75,”

Wilkins does not teach, disclose or suggest “said electron generating portion is disposed in said magnetic field” as recited in amended Claim 1.

Hence, Claim 1 is patentable over Wilkins and should be allowed by the Examiner. Claims 2-4 and new Claims 6-9, at least based on their dependency on Claim 1, are also believed to be patentable over Wilkins.

Claim 4

Claim 4 has been amended to depend from Claim 1 and at least based on its dependency on Claim 1 is believed to be patentable over Wilkins.

35 U.S.C. §103(a) Rejection

Claim 5 stands rejected under 35 U.S.C. §103(a) as being obvious in view of Wilkins and further in view of Orloff (U.S. Patent No. 4,629,898).

Applicants submit that Claim 5 has been canceled without prejudice and request that the rejection be withdrawn.

The Examiner is encouraged to contact the undersigned to discuss any other issues requiring resolution.

Conclusion

In view of the above, reconsideration and allowance of all the claims are respectfully solicited.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

I hereby certify that this correspondence is being deposited with the United States Post Office with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendments
Commissioner for Patents POB 1450,
Alexandria, VA 22313-1450 on

November 14, 2005

(Date of Deposit)

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Respectfully submitted,

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Encls:

A petition for a one-month extension of
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